HW#7B: Absolute Value Equations

Due Date: Tuesday, Sept. 18th , 2012

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

**Directions:** Solve the inequality and write your solution as a compound inequality, if possible. Graph your answer.

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| **Example 3:** What are the values of d that satisfy the inequality |- d + 4| **?** | | 7) Solve: What are the values of d that satisfy the inequality |b – 5| < -10 ? |
| 8) What are the values of d that satisfy the inequality  |-6d + 4| **?** | | 9) What are the values of d that satisfy the inequality |8 + 4x| **?** |
| **Example 4:** Solve and graph: 4|w| - 1 | | 10) 5|k|< 10 |
| 11) |w| - 1 | | 12) -2|k – 1|> 10 |
| **Example 5:**   + 3  10 | | 13) 5 - |w| **≤** 15 |
| 14) 2|3w + 8| - 13 < -5 | | 15) Find the values of v: |v – 5| - 4 > 3 |
| 16) Which inequality is equivalent to x < 1 *or* x > 5?  A. |x + 8| - 2 > 10  B. 3|6 – 2x| > 12  C. |5x + 9| < 10  D. |7 – 4x| - 9 < 8 | | 17) Solve the inequality. Graph your solution. |
| 18) Determine whether the given value if a solution of the inequality  4|x – 5| + 6 < 14; 10 | | 19) Solve the inequality. Graph your solution. |
| 20) Ms. Mason doesn’t swear, but if she did, she would swear that her work below is correct. ***Describe*** and ***correct*** her error in solving the inequality.  *Your work here:*    *Explanation here:* | 21) Ms. Ziegler never makes mistakes… or does she? ***Describe*** and ***correct*** her error in solving the inequality… that is, if you can find it.  *Your work here:*          *Explanation here:* | |